IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Reddy, Manne S. et al.) Confirm. No.: 6006 Serial No.: 10/809,192) Art Unit: 1624

Filed: March 25, 2004) Examiner: Moore, Susanna
For: CRYSTALLINE CETIRIZINE MONOHYDROCHLORIDE

Docket No.: BULK 3.3-045

Mail Stop Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION OF NARASIMHA MURTHY HARIKEERTHI UNDER 37 C.F.R. SECTION 1.132

I. Narasimha Mmurthy Harikeerthi, declare:

- This declaration is submitted pursuant to a response to an Office Action dated April 2, 2007 in the above-referenced patent application.
 - 2. I am employed at Dr. Reddy's Laboratories, Ltd.
 - 3. My position is Assistant Manager in Research and Development department,
 - 4. I am an experienced pharmaceutical chemist. I am graduated from Jawaharlal Nehru
- Technological University (JNTU) with M. Sc., (Applied Chemistry), degree in the year 2005. I have 13 years of experience in pharmaceutical industry, with 10 years of specific experience in pharmaceutical solids.
- It is my understanding that the above-mentioned Office Action alleges that solid material produced in Example IV.1.2 of U.S. Patent No. 6,255,487 to Duchene et al. is the same as the crystalline forms I and II of cetirizine monohydrochloride claimed in Dr. Reddy's U.S. Patent Application No. 10/809,192.
- For the reasons stated herein below, it is my opinion as one skilled in the art of pharmaceutical chemistry and bulk actives that the above-mentioned solid disclosed in Duchene

cannot be identical to any crystalline cetirizine monohydrochloride claimed in Dr. Reddy's U.S. Patent Application No. 10/809,192.

- Duchene specifically identifies the material produced in Example IV.1.2. as cetirizine free base. See col. 19, lines 45-46.
- 8. In my view as one skilled in the art, there is no room for significant doubt that the material of Example IV.1.2 of Duchene is in fact cetirizine free base.
- 9. Thus, the first portion of hydrochloric acid (0.05M, which is 8 ml of aqueous 6N HCl) is clearly used to neutralize the potassium component of the reacted 0.05 moles of potassium salt of 2-(1-piperazinyl) ethoxyacetate, which is a base and is present in the reaction from the beginning. The pH of the solution is not indicative of salt formation and the resulting oil cannot be a salt either. There is no likelihood whatsoever for formation of cetirizine hydrochloride at that stage.
- 10. The second portion of the hydrochloric acid (lines 38-9) is added to neutralize unreacted 2-(1-piperazinyl) ethoxyacetate. Importantly, the addition is accomplished in an organic solvent, acetone, and thus clearly signifies its purification/isolation purpose, rather than a salt preparation carried out in water where it is possible to lower pH to a degree significant enough to form a salt.
- 11. In contrast, Dr. Reddy's process for making a hydrochloride salt of cetirizine is carried out to a definitive pH (2-3), in water. See Specification, at p. 19, Example 1.

I verify under penalty of perjury that the forgoing is my true opinion.

Narasimha Murthy Harikeerthi

Date:28 September, 2007